

Appln. Serial No. 09/773,054
Amendment Dated January 15, 2009
Reply to Office Action Mailed October 15, 2008

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1 1 – 4. (Cancelled)

1 5. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead with a nozzle plate and a first service module removably installed on the printer,
3 comprising:

4 identifying a printhead-related service condition not adequately addressed by servicing
5 the printer with the first service module being in an un-worn condition;

6 providing a second service module with a service function different from the first service
7 module and adapted to address said printhead-related service condition, the second service
8 module removably installable on the printer;

9 removing the first service module from the printer;

10 installing the second service module in the printer in place of the first service module;

11 using the second service module, conducting a special printhead-related servicing
12 operation.

1 6. (Previously Presented) The method of claim 5, further comprising:

2 after completion of the special printhead-related servicing operation, removing the
3 second service module from the printer; and

4 installing the first service module in the printer in place of the second service module.

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1 7. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead with a nozzle plate and a first service module removably installed on the printer,
3 comprising:

4 identifying a printhead-related service condition not adequately addressed by servicing
5 the printer with the first service module being in an un-worn condition;

6 providing a second service module with a service function different from the first service
7 module and adapted to address said printhead-related service condition, the second service
8 module removably installable on the printer and in place of the first service module;

9 providing a set of instructions for using the second service module with the inkjet printer
10 to the printer user, wherein the step of providing a set of instructions includes providing a set of
11 machine readable printer instruction code for loading into the printer.

1 8. (Previously Presented) The method of claim 7 wherein the printer is controlled
2 by a host computer, and wherein the step of providing the set of instructions includes
3 downloading the set of printer instruction code from the host computer.

1 9 – 13. (Cancelled)

1 14. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead with a nozzle plate and a first service module removably installed on the printer,
3 comprising:

4 identifying a printhead-related service condition not adequately addressed by servicing
5 the printer with the first service module being in an un-worn condition;

6 providing a second service module with a service function different from the first service
7 module and adapted to address said printhead-related service condition, the second service
8 module removably installable on the printer and in place of the first service module, wherein said
9 printhead-related service condition includes ink on a printhead carriage interconnect, and the
10 second service module includes a brush arranged to clean the interconnect.

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1 15. (Currently Amended) A method for servicing an inkjet printer including an inkjet
2 printhead with a nozzle plate and a first service module removably installed on the printer,
3 comprising:

4 identifying a printhead-related service condition not adequately addressed by servicing
5 the printer with the first service module being in an un-worn condition;

6 providing a second service module with a service function different from the first service
7 module and adapted to address said printhead-related service condition, the second service
8 module removably installable on the printer and in place of the first service module, wherein said
9 printhead-related service condition includes vibration or shock incurred during shipment or
10 moving of the printer, and the second service module includes a special capping structure having
11 a range of movement along an axis generally perpendicular transverse to a nozzle array of the
12 printhead, and a bias structure which urges the capping structure toward and into engagement
13 with the printhead during a capping procedure.

1 16. (Original) The method of claim 15 wherein the special capping structure includes
2 a relative hard, non-resilient cap structure which contains the printhead during the capping
3 procedure.

1 17 – 18. (Cancelled)

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- 1 19. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead and a removable first service module, comprising:
3 providing a second service module different from the first service module and adapted to
4 address a printhead-related service condition not adequately addressed by the first service
5 module being in an un-worn condition, the second service module removably installable on the
6 printer and in place of the first service module;
7 providing a set of instructions for using the second service module with the inkjet printer
8 to the printer user, wherein the step of providing a set of instructions includes providing a set of
9 machine readable printer instruction code for loading into the printer;
10 installing the second service module in the printer;
11 conducting a printhead-related service operation using the second service module.

- 1 20. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead and a removable first service module, comprising:
3 providing a second service module different from the first service module and adapted to
4 address a printhead-related service condition not adequately addressed by the first service
5 module being in an un-worn condition, the second service module removably installable on the
6 printer and in place of the first service module;
7 providing a set of instructions for using the second service module with the inkjet printer
8 to the printer user, wherein the printer is controlled by a host computer, and the step of providing
9 a set of instructions includes downloading the set of printer instruction code from the host
10 computer;
11 installing the second service module in the printer;
12 conducting a printhead-related service operation using the second service module.

- 1 21. (Canceled)

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1 22. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead and a removable first service module, comprising:
3 providing a second service module different from the first service module and adapted to
4 address a printhead-related service condition not adequately addressed by the first service
5 module being in an un-worn condition, the second service module removably installable on the
6 printer and in place of the first service module;
7 installing the second service module in the printer;
8 conducting a printhead-related service operation using the second service module;
9 after completion of the printhead-related servicing operation, removing the second
10 service module from the printer; and
11 installing the first service module in the printer in place of the second service module.

1 23 – 26. (Cancelled)

1 27. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead and a removable first service module, comprising:
3 providing a second service module different from the first service module and adapted to
4 address a printhead-related service condition not adequately addressed by the first service
5 module being in an un-worn condition, the second service module removably installable on the
6 printer and in place of the first service module;
7 installing the second service module in the printer;
8 conducting a printhead-related service operation using the second service module;
9 wherein said printhead-related service condition includes ink on a printhead carriage
10 interconnect, and the second service module includes a cleaning element arranged to clean the
11 interconnect during a special cleaning mode with the printhead removed from the carriage.

1 28 – 29. (Cancelled)

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1 30. (Currently Amended) An apparatus for use in an inkjet printing system including
2 an inkjet printhead and a standard service module removably installed in the printing system, the
3 apparatus comprising a special service module configured to be removably installed in the
4 printing system in place of the standard service module to perform a special service function on
5 the printhead which is not performed by the standard service module being in an un-worn
6 condition, the special service module removably installable [[on]] in the printing system printer
7 and in place of the standard service module, wherein the special service module includes a
8 housing and at least one component mounted to the housing to perform the special service
9 function.

1 31. (Previously Presented) A method for servicing an inkjet printer including an
2 inkjet printhead with a nozzle plate and a first service module removably installed on the printer,
3 comprising:

4 identifying a printhead-related service condition not adequately addressed by servicing
5 the printer with the first service module;
6 providing a second service module with a service function different from the first service
7 module and adapted to address said printhead-related service condition;
8 removing the first service module from the printer;
9 installing the second service module in the printer in place of the first service module;
10 using the second service module, conducting a special printhead-related servicing
11 operation;
12 after completion of the special printhead-related servicing operation, removing the
13 second service module from the printer; and
14 installing the first service module in the printer in place of the second service module.

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1 32. (Currently Amended) A method for servicing an inkjet printer including an inkjet
2 printhead with a nozzle plate and a first service module removably installed on the printer,
3 comprising:

4 identifying a printhead-related service condition not adequately addressed by servicing
5 the printer with the first service module in an un-worn condition, said printhead-related service
6 condition including vibration or shock incurred during shipment or moving of the printer;

7 providing a second service module with a service function different from the first service
8 module and adapted to address said printhead-related service condition, wherein the second
9 service module includes a special capping structure having a range of movement along an axis
10 generally perpendicular transverse to a nozzle array of the printhead, and a bias structure which
11 urges the capping structure toward and into engagement with the printhead during a capping
12 procedure, and wherein the special capping structure including a relative hard, non-resilient cap
13 structure which contacts the printhead during the capping procedure; and

14 performing the capping procedure with the second service module installed in the printer,
15 and maintaining contact between the non-resilient cap structure and the printhead to prevent a
16 pumping action on the printhead when subjected to vibration and shock.

1 33. (Previously Presented) The method of claim 32, wherein a constant closed
2 volume is maintained between the cap structure and the printhead during the capping procedure.

1 34 – 44. (Cancelled)

1 45. (Previously Presented) An inkjet printing system, comprising:
2 an inkjet printhead;
3 a service area for performing service functions on the printhead;
4 a first service module for removable mounting at the service area to perform service
5 functions on the printhead during a standard printhead service mode;
6 a second service module for removable mounting at the service area in place of the first
7 service module to perform a different service function from that performed by the first service
8 module in an un-worn condition on the printhead during a special printhead service mode.

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- 1 46. (Previously Presented) The system of Claim 45 further comprising:
 - 2 a printhead carriage for mounting the printhead and arranged for traversing movement
 - 3 along a print area and for moving to the service area;
 - 4 a service carriage for removably mounting the first service module or the second service
 - 5 module.